

Computing key concept knowledge

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Computing systems and networks						
	To explain that technology is something that can help us.	To recognise different types of computers used in school.	To recognise that a digital device is made up of several parts. To recognise that a network is made up of a number of components.	To recognise that the World Wide Web is part of the internet. To outline how information can be shared via the World Wide Web.	To explain that computers can be connected together to form IT systems. To relate that search engines are examples of large IT systems.	To recognise that connections between computers, allow access to shared stored files. To recognise computers connected to the Internet allow people in different places to work together.
Presenting Information and Creating Multimedia						
	To recognise computers can be used to create art. To recognise that a keyboard is used to enter text into a computer. To recognise that the appearance of text can be changed.	To recognise that some digital devices can capture images using a camera. To recognise that photographs can be changed after they have been taken. To identify that computers can be used to play sounds or different instruments.	To explain that an animation is made up of a sequence of images. To recognise how text and images can be used together to convey information. To recognise how different font styles and effects are used for particular purposes.	To identify that an input device is needed to record sound. To identify that output devices are needed to play audio. To recognise that audio can be edited.	To identify that a vector drawing comprises separate objects and can be modified separately or as groups. To recognise that filming techniques can be used to create different effects. To identify that videos can be	To explain that 3D models can be created on a computer. To recognise that web pages are written by people. To recognise that web pages can contain different media types.

				To use an application to change a part of a whole digital image.	edited on a recording device or on a computer.	To recognise that a website is a set of hyperlinked web pages.
Data and information						
	To recognise that information can be presented.	To explain that we can present information using a computer. To use a computer program to present information in different ways.	To explain that a branching database is an identification too, structured using yes/no questions.	To recognise that a sensor can be used as an input device to data collection over time.	To explain that a computer program can be used to organise data. To explain that computer programs can be used to compare data visually.	To explain what an item of data is in a spreadsheet. To explain that formulas can be used to produce calculated data.
Programming and algorithms.						
	To understand that a program is a set of commands that a computer can run. To combine commands in a program.	To describe that a series of instructions is a sequence. To recognise that you can predict the outcome of a program. To explain what happens when we change the order of instructions.	To explain that programs start because of an input. To explain that the order of commands can affect a program's output.	To explain that we can use a loop command in a program to repeat instructions. To explain that in programming there are indefinite loops and count-controlled loops.	To explain that selection can be used to branch the flow of a diagram. To explain that a loop can be used to repeatedly check whether a condition has been met.	To define a 'variable' as something that is changeable. To explain that a variable can be used in a program, e.g. 'score'